



Effect of Acupressure on Dynamic Balance in Elderly Women: A Randomized Controlled Trial

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ABSTRACT

Background: Balance disorders are common in the elderly and are a major cause of falls. This study aimed to determine the effect of acupressure on dynamic balance in elderly women.

Methods: This randomized controlled clinical trial was conducted on 72 elderly women in Qazvin, Iran. The intervention group received rotary massage using the thumb at the pressure points for 4 weeks, 3 times a week for 20 minutes each session. Dynamic balance in both groups was measured before, 2 and 4 weeks after the intervention using timed up and go test and the step test. Data were analyzed using two way repeated measures ANOVA.

Results: The mean age of participants was 67.34 ± 6.30 with a range of 60 to 80 years old. The results showed statistically significant improvement in the dynamic balance quantified by timed up and go test ($\Delta = 26.53$) and step test for the right ($\Delta = 35.22$) and left ($\Delta = 32.62$) legs ($p < .001$). However, in the control group, no significant change was observed in the dynamic balance after completion of the program.

Conclusion: The results support that acupressure therapy can be an effective, safe, and inexpensive method to improve the dynamic balance and maintain maximum autonomy of the elderly.

ARTICLE HISTORY

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Introduction

Aging involves all living beings, including humans (Zahmatkeshan et al., 2012). Population aging is a serious challenge for developed and developing countries (Ahmad, Ismail, & Rahman, 2011). The decline in both the birth and death rate in the mid-twentieth century has led to dramatic changes in the demographic structure of Asian countries (Yoon & Hendricks, 2020). Iran is also undergoing these demographic changes due to rapid growth of the aging population. According to the reports of the previous census, the aging population in Iran has increased from 6.6% in 1996 to 7.7 in 2006 and 9.3% in 2016 (Mirzaie & Darabi, 2017). Aging is an inevitable process that is accompanying with significant changes in physical function; hence, population aging has become one of the